Amendments to the claims:

1-28. (Cancelled).

29. (Currently amended) A transformed yeast strain suitable for use as a feed supplement comprising a nucleic acid polymer for encoding a polypeptide ~~ordinarily exogenous to yeast~~ under control of a ~~yeast derived~~ promoter, ~~said nucleic acid polymer being selected from the group consisting of synthetic and natural nucleic acid polymers,~~ said nucleic acid polymer having a sequence that encodes a peptide with ~~codes for expression of~~ two or more amino acid residues, the amino acids in the peptide being present in a ratio that offsets a deficiency in a predetermined feed source for a target animal, the deficiency being that the predetermined feed source presents amino acids in a ratio such that the weight increase the target animal gains when fed on the predetermined feed source alone is less than the weight increase the target animal gains over the same period when fed on the predetermined feed source and the feed supplement ~~is less than optimal for efficient use of protein for the growth and weight gain~~.

30. (Previously presented) The transformed yeast strain of claim 29, wherein the expression of said polypeptide is inducible.

31. (Currently amended) The transformed yeast strain of claim 29, wherein said nucleic acid polymer is inserted into said strain's genome ~~chromosome~~.

32. (Currently amended) The transformed yeast strain of claim 29, wherein said polypeptide is ~~held~~ retained in the cells of ~~by~~ said strain.

33. (Previously presented) The transformed yeast strain of claim 29, wherein said strain is auxotrophic, but was non-auxotrophic prior to transformation.

34. (Previously presented) The transformed yeast strain of claim 29, wherein said strain is selected from the group consisting of Saccharomyces cerevisiae, Pichia pastoris, P. stipidis, Yarrowia spp, Candida spp, Kluyveromyces waltii, K. lactis, K. drosophiliarium, Zygosaccharomyces spp, Schwannomyces occidentalis, Schizosaccharmyces pombe, Hansenula spp, and Torulaspora delbrueckii.

35. (Currently amended) The transformed yeast strain of claim 29, wherein ~~whereby~~ said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: 3 methionine, 6 histidine, 6 lysine, 2 threonine, 2 isoleucine, 1 valine, and 1 tryptophan residues ~~in a ratio that is about 3 : 6 : 6 : 2 : 2 : 1 : 1~~.

36. (Previously presented) The transformed yeast strain of claim 29 wherein said promoter is selected from the group consisting of AOX 1, GAP, FLD1, PEx8, YPT1, and GAPDH.

37. (Currently amended) A construct for insertion into a host organism comprising a gene having a nucleic acid polymer for encoding a polypeptide ordinarily exogenous to said organism and a promoter, with said construct selected from the group consisting of plasmids, cosmids, phagemids, and artificial chromosomes, said nucleic acid polymer having a sequence that codes for expression of a polypeptide comprising two or more amino acid residues, the amino acids in the peptide being present in a ratio that offsets a deficiency in a predetermined feed source for a target animal, the deficiency being that the predetermined feed source presents amino acids in a ratio such that the weight increase the target animal gains when fed on the predetermined feed source alone is less than the weight increase the target animal gains over the same period when fed on the predetermined feed source and the organism transformed with said construct ~~is less than optimal for efficient use of protein for the growth and weight gain of the target animal~~.

38. (Original) The construct of claim 37 wherein said construct is a pRS316 plasmid with a GAPDH promoter.

39. (Currently amended) The construct of claim 37 wherein said polypeptide comprising 6 Lysine, 3 Methionine/Cysteine; 2 Threonine; 1 Valine; 2 Isoleucine; 6 histidine; and 1 Tryptophan amino acid residues, wherein methionine/cysteine may be either methionine or cysteine ~~in a ratio that is about 6 : 3 : 2 : 1 : 2 : 6 : 1~~.

40-42. (Cancelled).

43. (Previously presented) A method for producing a yeast additive for use in animal feed comprising, inserting the construct of claim 37 into a yeast strain, expressing the gene in said construct to produce a peptide.

44. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, methionine/cysteine, threonine, valine, isoleucine, arginine, and tryptophan, in a ratio of about 100 : 60: 60 : 75 : 60 : 80 : 20, wherein methionine/cysteine may be either methionine or cysteine.

45. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, and methionine/cysteine, and histidine, in a ratio of about 3 : 1, wherein methionine/cysteine may be either methionine or cysteine.

46. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, methionine/cysteine, arginine, and histidine, in a ratio of about 100 : 20 : 100 : 35, wherein methionine/cysteine may be either methionine or cysteine.

47. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, arginine, histidine, tryptophan, isoleucine, leucine, valine, phenylalanine/tyrosine, methionine/cysteine, threonine, proline, and glycine/serine, in a ratio of about 100 : 100 : 33 : 15 : 67 : 100 : 75 : 100 : 75 : 67 : 33 : 67, wherein methionine/cysteine may be either methionine or cysteine with methionine constituting at least 50% of the sulfur-containing amino acids in the polypeptide, and phenylalanine/tyrosine may be either phenylalanine or tyrosine with phenylalanine constituting at least 50% of the aromatic amino acids in the polypeptide, and glycine/serine may be either glycine or serine.

48. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, arginine, histidine, tryptophan, isoleucine, leucine, valine, phenylalanine/tyrosine, methionine/cysteine, threonine, proline, and glycine/serine, in a ratio of about 100 : 100 : 33 :

15 : 67 : 100 : 75 : 100 : 75 : 75 : 20 : 50, wherein methionine/cysteine may be either methionine or cysteine with methionine constituting at least 50% of the sulfur-containing amino acids in the polypeptide, and phenylalanine/tyrosine may be either phenylalanine or tyrosine with phenylalanine constituting at least 50% of the aromatic amino acids in the polypeptide, and glycine/serine may be either glycine or serine.

49. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: lysine, isoleucine, methionine/cysteine, phenylalanine/tyrosine, threonine, tryptophan, and valine, in a ratio of about 100 : 15 : 100 : 85 : 50 : 20 : 20, wherein methionine/cysteine may be either methionine or cysteine, and phenylalanine/tyrosine may be either phenylalanine or tyrosine.

50. (New) The transformed yeast strain of claim 29, wherein said nucleic acid polymer when expressed produces a polypeptide comprising the following amino acid units: arginine, methionine, lysine, threonine, and histidine, in a ratio of about 100 : 10 : 50 : 10 : 25.